

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent is:

1. A method for transmitting data in unused portions of licensed communication channels comprising:
  3. selecting an unused first portion of a first licensed communication channel,
  4. configuring a transmitter to operate in said unused first portion, and
  5. transmitting downstream digital data using a transmitting antenna operating on said first portion.
1. 2. The method of transmitting data of claim 1 further comprising:
  2. selecting an unused second portion of a second licensed communication channel,
  3. configuring an upstream downconverter to operate in said unused second portion,
  4. and
  5. receiving upstream digital data using a receiving antenna operating on said unused second portion.
1. 3. The method of transmitting data of claim 2 wherein said first communications channel and said second communications channel are different.
1. 4. The method of transmitting data of claim 1 wherein said downstream digital data is selected from a group consisting of telephony signals, high-speed data, digital video signals and DTV signals.

1 5. The method of transmitting data of claim 1 further comprising enabling a subscriber  
2 to select a method of transmitting upstream data from using the unused second  
3 portion, using a cable connection, and using a wired connection.

1 6. The method of transmitting data of claim 1 wherein said transmitting antenna  
2 comprises an array of transmitting antennae.

1 A method for receiving data in unused portions of licensed communication channels  
2 comprising:

3 selecting an unused first portion of a first licensed communication channel,  
4 configuring an upstream downconverter to operate in said unused first portion,  
5 and  
6 receiving upstream digital data using a receiving antenna operating on said first  
7 portion.

1 8. The method for receiving data of claim 7 further comprising the steps of:  
2 selecting an unused second portion of a second licensed communication channel,  
3 configuring a transmitter to operate in said unused second portion, and  
4 transmitting downstream digital data using a transmitting antenna operating on  
5 said unused second portion.

1 9. The method for receiving data of claim 8 wherein said first communications channel  
2 and said second communications channel are different.

1 10. The method for receiving data of claim 7 further comprising enabling a subscriber to  
2 select a method of transmitting upstream data from using the unused first portion,  
3 using a cable connection, and using a wired connection.

1 11. The method for receiving data of claim 7 wherein said upstream digital data is  
2 selected from a group consisting of telephony signals, high-speed data, digital video  
3 signals and DTV signals.

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1 12. The method for receiving data of claim 7 wherein said receiving antenna comprises  
2 an array of receiving antennae.

1 13. The method for receiving data of claim 7 wherein said transmitting antenna comprises  
2 an array of transmitting antennae.

1 14. A method for transmitting and receiving data in unused portions of licensed  
2 communication channels comprising:

3 selecting an unused first portion of a first licensed communication channel,  
4 configuring a transmitter to operate in the said unused first portion,  
5 transmitting downstream digital data using a transmitting antenna operating on  
6 said first portion,

7 selecting an unused second portion of a second licensed communication channel,  
8 configuring an upstream downconverter to operate in the said unused second  
9 portion, and

10 receiving upstream digital data using a receiving antenna operating on said  
11 unused second portion.

1 15. The method for transmitting and receiving data of claim 14 wherein said first  
2 communications channel and said second communications channel are different.

1 16. The method for receiving and receiving data of claim 14 further comprising enabling  
2 a subscriber to select a method of transmitting upstream data from using the unused  
3 second portion, using a cable connection, and using a wired connection.

4 17. The method for transmitting and receiving data of claim 14 wherein said downstream  
5 ~~digital data and said up-stream digital data is selected from a group consisting of~~  
6 telephony signals, high-speed data, digital video signals and DTV signals.

1 18. The method for transmitting and receiving data of claim 14 wherein said receiving  
2 antenna comprises an array of receiving antennae.

1 19. The method for transmitting and receiving data of claim 14 wherein said transmitting  
2 antenna comprises an array of transmitting antennae.